Claims

1. Microsatellite markers (based on hypervariable genome sections) for plants of the Triticum aestivum species, as well as of the Tribe Triticeae using the polymerase chain reaction (PCR), characterized in that a sequence tagged site (STS), which is defined by two specific primers, which average a length of 20 ± 3 bases and flank a microsatellite sequence, which microsatellite markers are amplified to polymorphisms (PCR products of different length).

2. The microsatellite markers of claim 1, ~~characterized in that~~ wherein the microsatellite sequence is a tandem-repetitive n-fold repetition of a di-, tri- or tetranucleotide sequence, in which $n \geq 10$.

3. The microsatellite markers of claim 1, ~~characterized in that~~ wherein the microsatellite sequence is a composite microsatellite sequence.

4. The microsatellite markers of claim 1, ~~characterized in that~~ wherein the microsatellite sequence is an imperfect sequence, in which individual bases are mutated.

5. The microsatellite markers of claim 1, ~~characterized in that~~ wherein the following primer pairs with assigned microsatellite sequences or a number thereof are contained.

6. A method for the preparation of a microsatellite marker of claims 1 to 5 for plants of the Triticum aestivum species as well of the Tribe Triticeae, characterized in that hypervariable genome sections (so-called microsatellites), with the help of the polymerase chain reaction (PCR), are amplified, subsequently separated and detected to polymorphous fragments in the presence of two specific primers, which flank a microsatellite sequence to the left and right of each microsatellite locus.

7. The method of claim 6, wherein highly resolving agarose gels, native polyacrylamide gels or denaturing polyacrylamide gels are used for the separation of the markers.

8. The method of claim 6, wherein, depending on the separation system, the detection is carried out by means of ethidium bromide staining, silver staining, radiographic labeling followed by autoradiography or by means of automatic sequencing equipment using dye- or fluorescence-labeled primers.

9. The use of the microsatellite markers of claims 1 to 7, for the genetic analysis of hexaploid and tetraploid cultivated forms of wheat.

10. The use according to claim 8 for the genetic mapping and marking of monogenic and polygenic properties and their selection for analyzing relationships and identifying varieties, as well as for evaluating the purity of varieties, identifying hybrids and breeding plants.